



DET03102 (0267.00080)

SUBSTITUTE SPECIFICATION

AXIALLY FIXED DISK CARRIER ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates, generally to a disk carrier assembly and, more specifically, to an axially fixed disk carrier assembly for a multi-disk clutch for a transmission.

2. Description of the Related Art

[0002] Conventional disk clutch assemblies include multiple annular disk shaped outer friction plates, which on their outer circumference are provided with radial outward directed teeth to be axially slidable and fixed against rotation on inwardly facing axial grooves of a drum shaped outer disk carrier. The prior art disk clutch assemblies further include multiple annular disk-shaped inner friction plates, which on their inner circumference are provided with radial inwardly directed teeth to be axially slidable and fixed against rotation in outward facing axial grooves of a cylindrical inner disk carrier. The outer and inner friction plates are arranged alternating axially and are bathed in an oil bath by the surrounding hydraulic fluid. By increasing the pressure of the hydraulic fluid the friction plates are axially pressed against each other, whereby the clutch is closed for the frictional transmission of torque between the outer disk carrier and the inner disk carrier. On the other hand, the disk clutch is opened by the reduction or removal of pressure of the hydraulic fluid.

[0003] The following discussion is based upon a conventional disk carrier assembly, wherein the disk carrier exhibits, distributed about the disk-facing circumference of a cylinder